ELSEVIER

Journal of Alloys and Compounds 267 (1998) 307–308

Journal of ALLOYS AND COMPOUNDS

Author Index of Volume 267

Akiba, E., 246
Akinlade, O., 195
Aldinger, F., 90
Andreev, A.V., 32
Ansara, I., 105
Antonova, N.V., 167
Arnold, Z., 32

Banerjee, A., 19
Bärner, K., 1
Bartashevich, M.I., 32
Bauer, J., 54
Beeri, O., 113
Ben-Eliahu, Y., 158
Berg, H., 279
Blaise, G., 283, 294
Bloch, J., 158
Bo Jung, C., 265
Bobet, J.-L., 136
Bodak, O.I., 189
Boily, S., 302
Borowski, R., 279
Bowman Jr., R.C., 171
Brill, M., 158
Brück, E., 37, 41
Buschow, K.H.J., 37, 41, 50, 59

Canepa, F., L12
Chen, Z.Y., 11
Chevalier, B., 136
Che, G.C., 11
Chuang, Y.C., 215
Cirafici, S., L12
Clewley, J.D., 171
Cohen, D., 113

Darriet, B., 136
Dash, S., 19
de Boer, F.R., 37, 41, 59
de Campos, M.F., 257
Delaey, L., 105
Ding, J., 199
Dou, S.X., 224
Drulis, H., 32
Du, Z., 121, 149

Ebel, T., 23
Engels, J.M., 283, 294

Fauth, F., 59
Feschotte, P., 142
Flanagan, T.B., 171
Fornasini, M.L., L12
Franzen, H.F., 86
Freitag, B., 279
Fries, S.G., 90

Fruchart, D., L1
Fujitani, S., 205
Fujita, N., 76
Fukuda, K., 274

Gachon, J.C., 142
Galadzhy, O.Ph., 167
Galez, P., 142
Gao, J.-r., 270
Gasgnier, M., 283, 294
Gavra, Z., 113, 158
Gerlach, M., 47
Gmelin, E., 1
Goto, T., 32
Gurin, V.N., 211

Hari Kumar, K.C., 90
Heier, K.R., 79
Hirscher, M., 47
Ho Kim, J., 265
Hofmann, M., L4
Hrynkiewicz, A.Z., 14
Huot, J., 302
Hurtado, I., 90

Ikoma, M., 252
Inoue, H., 76
Isnard, O., 50, 59
Iwakura, C., 76, 252

Jantzen, T., 90
Jeitschko, W., 23
Johnson, J.R., 113
Jorda, J.L., 142

Kaida, S., 252
Kamarád, J., 32
Kang, H., 1
Kennedy, S.J., 224
Khrussanova, M., 235
Klaasse, J.C.P., 37, 41
Kleppa, O.J., 128
Kolenda, M., L4
Konyk, M.B., 189
Kou, X.C., 41
Kronmüller, H., L9, 47
Kulińska, A., 14
Kumar, K.C.H., 105
Kuntz, J.J., 142

Landgraf, F.J.G., 257
Leonov, A.V., L14
Liang, G., 302
Liang, J., 6
Liang, P., 90
Liu, G., 149

Liu, W., 215
Liu, H.K., 224
Lomello-Tafin, M., 142
Lönnberg, B., 54
Luan, B., 224
Lukas, H.L., 90
Lundström, T., 54
Luo, H.M., 11
Luo, S., 171

Machado, R., 257
Malaman, B., 182
Mandal, P., 1
Manfrinetti, P., 154
Marszałek, M., 14
Matsumoto, I., 252
McCormick, P.G., 199
Medvedeva, I.V., 1
Melnyk, G.A., L1
Merlo, F., L12
Meschel, S.V., 128
Miao, W.F., 199
Minato, K., 274
Mintz, M.H., 113
Missell, F.P., 257
Mohan, Ch.V., L9
Mommer, N., 47
Morozkin, A.V., L14
Mudry, S.I., 100
Müller, I., 279
Müller, R., 279

Nakamura, Y., 205
Neiva, A.C., 257
Niemann, S., 23
Nikitin, S.A., L14
Nishio, K., 205
Nohara, S., 76
Norlidah, M.N., 182

O'Brien, J.R., 70
Oesterreicher, H., 66, 70
Oguro, K., 205
Okada, S., 211

Palenzona, A., 154
Palenzona, R., 154
Pechev, S., 136
Penc, B., L4
Peshev, P., 235
Pirault, E., 199
Poddar, A., 1
Poeppelmeier, K.R., 79
Prasad, R., 19

Qian, Y.T., 11

Qiao, G.W., 41
Qiao, Z., 6

Rao, G., 6
Ritter, C., 59
Roden, B., 279
Rodrigues, D., 257
Romaka, L.P., L1
Romero, S.A., 257
Routsi, Ch.D., 192

Salamakha, P., L16, 192
Sato, K., 205
Schobinger-Papamantellos, P., 59
Schulz, R., 302
Seifert, H.J., 90
Serizawa, H., 274
Seropegin, Yu.D., L14
Shen, J., 6
Shi, Y., 6
Singh, R.N., 195
Skolozdra, R.V., L1
Ślaski, M., L4
Sologub, O., 192
Sommer, F., 195
Song, X.-p., 270
Spencer, P.J., 90
Srivastava, O.N., 240
Srivastava, S., 240
Stadnyk, J.V., L1
Stern, C.L., 79
Street, R., 199
Su, X., 121, 149
Sub Lee, K., 265
Sui, Y.C., 215
Sviridov, I.A., L14
Szytuła, A., L4

Tanaka, T., 211
Terzieva, M., 235
Thiede, V.M.T., 23
Tobola, J., L1
Tretyachenko, L.A., 167
Tskhadadze, I.A., L14
Tsushio, Y., 246

Uehara, I., 205

Van Neste, A., 302
Velikanova, T.Ya., 167
Venturini, G., 182
Venugopal, V., 19

Wade, L.A., 171
Wang, X., 79

Elsevier Science S.A.
PII 0925-8388(97)00241-2

Wang, X.-t., 270
Wodniecka, B., 14
Wodniecki, P., 14
Wollants, P., 105

Xianji, Z., 231
Xiao, Q.F., 215

Yakinthos, J.K., 192
Yongning, L., 231
Yuasa, K., 252
Yuasa, S.-i., 252

Zadvorkin, S.M., 32
Zeng, L., 86
Zhang, Z.D., 215
Zhang, C., 37, 41
Zhang, S.G., 76
Zhang, W., 121, 149
Zhao, T., 215
Zhao, X.G., 215
Zhao, Z.X., 11
Zhuang, W., 6

ELSEVIER

Journal of Alloys and Compounds 267 (1998) 309–313

Journal of ALLOYS AND COMPOUNDS

Subject Index of Volume 267

AB_5 compound
magnetic relaxation of hydrogen in $La(Ni_{0.7}Fe_{0.3})_5$ 47
Al alloys
present achievements, problems and perspectives associated with a semi-empirical study of the Al–Cu–Mg–Si–Zn light alloy system 90
Alloy processing
present achievements, problems and perspectives associated with a semi-empirical study of the Al–Cu–Mg–Si–Zn light alloy system 90
Amorphous
electrochemical characteristics of a homogeneous amorphous alloy prepared by ball-milling Mg_2Ni with Ni 76
Amorphous thin film
anomalous magnetic behaviour Of $(Tb_{0.27}Dy_{0.73})_{0.32}Fe_{0.68}$ amorphous thin film L9
Anisotropy
effects of reduced hydrogen pressure on magnetic properties of HDDR-treated NdFeGaB alloy powders 270
Antimony
interaction of neodymium and antimony with transition metals L16

Ball-milling
electrochemical characteristics of a homogeneous amorphous alloy prepared by ball-milling Mg_2Ni with Ni 76
Battery internal pressure
charge characteristics of sealed-type nickel/metal-hydride battery 252
Bi–Zn alloys
thermodynamic investigation of viscosity in Cu–Bi and Bi–Zn liquid alloys 195
Boron-rich boride
a new scandium boride: ScB_{19} 211

Calorimeter
enthalpy increment measurements of $Sr_3Zr_2O_7$(s) and $Sr_4Zr_3O_{10}$(s) 19
Calorimetry
standard enthalpies of formation of some 3d transition metal silicides by high temperature direct synthesis calorimetry 128
Calphad
present achievements, problems and perspectives associated with a semi-empirical study of the Al–Cu–Mg–Si–Zn light alloy system 90
Cerium cobalt germanides
ternary Ce–Co–Ge system 189
Cerium nickel silicide
crystal structure and magnetic properties of the compound $Ce_2Ni_{1.5}Si_2$ 50
Cerium valence
crystal structure and magnetic properties of the compound $Ce_2Ni_{1.5}Si_2$ 50
Charge characteristics
charge characteristics of sealed-type nickel/metal-hydride battery 252

Cobalt
thermodynamic optimisation of the Co–Nb system 105
Co–Ce system
a thermodynamic modelling of the Co–Ce system 121
Compound-energy model
a thermodynamic modelling of the Co–Ce system 121
Compound formation
Cu_xY compounds as thin films: crystallographic and compositional analyses of yttrium rich phases 283
Cu_xY compounds as thin films: crystallographic and compositional analyses of copper rich phases 294
Concentration profiles
Cu_xY compounds as thin films: crystallographic and compositional analyses of yttrium rich phases 283
Cu_xY compounds as thin films: crystallographic and compositional analyses of copper rich phases 294
Co rich compounds
magnetic properties of $Ho_2Co_{17-x}Ga_x$ compounds 37
magnetic properties of $YCo_{10}Mo_{2-x}M_x$ compounds (M=Si or V) 41
Co–Sm system
a thermodynamic assessment of the Co–Sm system 149
Crystal
synthesis and characterization of new cuprates with the 1222 structure $(Ln,Zn)Sr_2(Ln,Ce)_2Cu_2O_z$ (Ln=rare earth element) 11
Crystal growth
crystal growth and structure of $Mn_{2.47}V_{0.94}Mo_{1.06}O_8$ 79
Crystal structure(s)
crystal structure of new $M'_6M''_{1.5-x}X_{1.5-x}$ compounds (M'=Zr, Hf; M''=Fe, Co, Ni; X=Sn, Sb) and electronic structure of $Zr_6Co_{1.65}Sn_{1.35}$ L1
magnetic properties of RRuGe (R=Gd-Er) compounds L4
physical properties of GdNiIn L12
interaction of neodymium and antimony with transition metals L16
$EuTa_2Al_{20}$, $Ca_6W_4Al_{43}$ and other compounds with $CeCr_2Al_{20}$ and $Ho_6Mo_4Al_{43}$ type structures and some magnetic properties of these compounds 23
crystal structure and magnetic properties of the compound $Ce_2Ni_{1.5}Si_2$ 50
the Fe ordering in RFe_6Ge_6 compounds with non-magnetic R (R= Y, Lu, Hf) studied by neutron diffraction and magnetic measurements 59
synthesis and crystal structure of $NdFe_{0.45}Ge_2$ and $HoFe_{0.13}Ge_2$ 86
the phase diagram of the Lu–In system 154
new $TbFeSi_2$- and $U_3Ni_4Si_4$-type structure compounds obtained in R–T–T'–X systems (R=rare earth elements; T=Mn, Co, Ru, Rh; T'=Ni, Cu, Pd, Pt; X=Si, Ge) 182
ternary Ce–Co–Ge system 189
synthesis and crystal structure of new representatives of the $YIrGe_2$ structure type 192
Cu–Bi alloys
thermodynamic investigation of viscosity in Cu–Bi and Bi–Zn liquid alloys 195

Elsevier Science S.A.
PII 0925-8388(97)00242-4

Decomposition
further studies of the isotherms of $LaNi_{5-x}Sn_x$–H for x=0–0.5 171
Degradation
lattice expanding behaviour and degradation of $LaNi_5$-based alloys 205
Dehydriding
hydriding and dehydriding characteristics of Mg-$LaNi_5$ composite materials prepared by mechanical alloying 235
Deuteride
on the charge/discharge behavior of Ti_2Ni electrode in 6 M KOH aqueous and deuterium oxide solutions 224
Deuteroxide
on the charge/discharge behavior of Ti_2Ni electrode in 6 M KOH aqueous and deuterium oxide solutions 224
Discharge capacity
effect of lanthanum additions on electrode properties of Mg_2Ni 231
Double oxide
estimation of the standard enthalpy of formation of double oxide 6

Electrical resistivity
physical properties of GdNiIn L12
Electrode
effect of lanthanum additions on electrode properties of Mg_2Ni 231
Electronic structure
crystal structure of new $M'_nM''_{15-x}X_{15-x}$ compounds (M'=Zr, Hf; M''=Fe, Co, Ni; X=Sn, Sb) and electronic structure of $Zr_6Co_{1.85}Sn_{1.15}$ L1
Enthalpies of formation
enthalpies of formation of Zr–Au compounds determined by direct reaction calorimetry 142
Enthalpy increment
enthalpy increment measurements of $Sr_2Zr_2O_7$(s) and $Sr_3Zr_5O_{13}$(s) 19
Enthalpy of formation
estimation of the standard enthalpy of formation of double oxide 6
standard enthalpies of formation of some 3d transition metal silicides by high temperature direct synthesis calorimetry 128
$ErBa_2Cu_3O_y$
cell volume expanded $ErBa_2Cu_3O_y$ near y=6.5 through getter annealing 70

Gallium
effects of reduced hydrogen pressure on magnetic properties of HDDR-treated NdFeGaB alloy powders 270

Hall effect
order parameter of the metal to insulator phase transition in the thio spinel $CuIr_2S_4$ 1
HDDR
effects of reduced hydrogen pressure on magnetic properties of HDDR-treated NdFeGaB alloy powders 270
Heavy water
on the charge/discharge behavior of Ti_2Ni electrode in 6 M KOH aqueous and deuterium oxide solutions 224
High-pressure
high-pressure studies of the $TiCr_{1.8}$–H_2 system Statistical thermodynamics above the critical temperature 113
High T_c superconductors
improvement of the cation-distribution in the polycrystalline high-temperature superconductor LaSrCuO 279
Holium
synthesis and crystal structure of $NdFe_{0.45}Ge_2$ and $HoFe_{0.13}Ge_2$ 86

Hydride(s)
structural and hydrogen sorption studies of $NdNi_{5-x}Al_x$ and $GdNi_{5-x}Al_x$ 136
magnetic and magnetoelastic properties of β-UH_3 32
Hydride formation
further studies of the isotherms of $LaNi_{5-x}Sn_x$–H for x=0–0.5 171
high-pressure studies of the $TiCr_{1.8}$–H_2 system Statistical thermodynamics above the critical temperature 113
Hydriding
hydriding and dehydriding characteristics of Mg-$LaNi_5$ composite materials prepared by mechanical alloying 235
Hydriding kinetics
the initial stages of the reaction between ZrCo and hydrogen studied by hot-stage microscopy 158
Hydrogen absorption
magnetic relaxation of hydrogen in $La(Ni_{0.7}Fe_{0.3})_5$ 47
charge characteristics of sealed-type nickel/metal-hydride battery 252
Hydrogenation behaviour
activation behaviour of ZrCrNi mechanically milled with nickel 265
Hydrogen desorption
hydrogen desorption properties of the quaternary alloy system $Mg_{2-x}M1_xNi_{1-y}M2_y$ 246
Hydrogen diffusion
magnetic relaxation of hydrogen in $La(Ni_{0.7}Fe_{0.3})_5$ 47
Hydrogen in metal(s)
the initial stages of the reaction between ZrCo and hydrogen studied by hot-stage microscopy 158
investigations on synthesis, characterization and hydrogenation behaviour of the spin- and thermal-melted versions of $LaNi_{5-x}Si_x$ (x=0.1, 0.3, 0.5) hydrogen storage materials 240
Hydrogen isotherms
further studies of the isotherms of $LaNi_{5-x}Sn_x$–H for x=0–0.5 171
Hydrogen storage
on the charge/discharge behavior of Ti_2Ni electrode in 6 M KOH aqueous and deuterium oxide solutions 224
Hydrogen storage alloy(s)
electrochemical characteristics of a homogeneous amorphous alloy prepared by ball-milling Mg_2Ni with Ni 76
hydriding and dehydriding characteristics of Mg-$LaNi_5$ composite materials prepared by mechanical alloying 235
charge characteristics of sealed-type nickel/metal-hydride battery 252
mechanical alloying and hydrogen absorption properties of the Mg–Ni system 302
hydrogen desorption properties of the quaternary alloy system $Mg_{2-x}M1_xNi_{1-y}M2_y$ 246
Hydrogen storage material
investigations on synthesis, characterization and hydrogenation behaviour of the spin- and thermal-melted versions of $LaNi_{5-x}Si_x$ (x=0.1, 0.3, 0.5) hydrogen storage materials 240
Hyperfine interactions
phase transition in $Ni_{50}In_{50}$ alloy studied with PAC method 14

Indium alloys
the phase diagram of the Lu–In system 154
In-situ X-ray diffractometry
lattice expanding behaviour and degradation of $LaNi_5$-based alloys 205
Interdiffusion
Cu_xY compounds as thin films: crystallographic and compositional analyses of yttrium rich phases 283
Cu_xY compounds as thin films: crystallographic and compositional analyses of copper rich phases 294

Intermetallics
$EuTa_2Al_{20}$, $Ca_6W_4Al_{43}$ and other compounds with $CeCr_2Al_{20}$ and $Ho_6Mo_4Al_{43}$ type structures and some magnetic properties of these compounds 23
structural and hydrogen sorption studies of $NdNi_{5-x}Al_x$ and $GdNi_{5-x}Al_x$ 136
Isostructural compounds
crystal structure of new $M'_6M''_{1.5-x}X_{1.5-x}$ compounds (M'=Zr, Hf; M''=Fe, Co, Ni; X=Sn, Sb) and electronic structure of $Zr_6Co_{1.65}Sn_{1.35}$ L1
Isothermal section
isothermal section of the Ti–Si–Ga system in the Ti-rich corner at 1350°C 167

KKR–CPA method
crystal structure of new $M'_6M''_{1.5-x}X_{1.5-x}$ compounds (M'=Zr, Hf; M''=Fe, Co, Ni; X=Sn, Sb) and electronic structure of $Zr_6Co_{1.65}Sn_{1.35}$ L1

La compound
magnetic relaxation of hydrogen in $La(Ni_{0.7}Fe_{0.3})_5$ 47
$LaNi_5$
investigations on synthesis, characterization and hydrogenation behaviour of the spin- and thermal-melted versions of $LaNi_{5-x}Si_x$ (x=0.1, 0.3, 0.5) hydrogen storage materials 240
Lanthanum
effect of lanthanum additions on electrode properties of Mg_2Ni 231
Large coercivity
anomalous magnetic behaviour Of $(Tb_{0.27}Dy_{0.73})_{0.32}Fe_{0.68}$ amorphous thin film L9
Laser flash method
thermal conductivity of technetium 274
La-Sr-Cu-O
improvement of the cation-distribution in the polycrystalline high-temperature superconductor LaSrCuO 279
Lattice strain
lattice expanding behaviour and degradation of $LaNi_5$-based alloys 205
Liquid alloys
the structure of liquid Bi_2Te_3 alloys near the stoichiometric region 100
thermodynamic investigation of viscosity in Cu–Bi and Bi–Zn liquid alloys 195
Lutetium alloys
the phase diagram of the Lu–In system 154

Magnetic after-effect
magnetic relaxation of hydrogen in $La(Ni_{0.7}Fe_{0.3})_5$ 47
Magnetic anisotropy
magnetic and magnetoelastic properties of β-UH_3 32
Magnetic ordering
physical properties of GdNiIn L12
Magnetic properties
magnetic properties of RRuGe (R=Gd-Er) compounds L4
synthesis and characterization of new cuprates with the 1222 structure $(Ln,Zn)Sr_2(Ln,Ce)_2Cu_2O_z$ (Ln=rare earth element) 11
$EuTa_2Al_{20}$, $Ca_6W_4Al_{43}$ and other compounds with $CeCr_2Al_{20}$ and $Ho_6Mo_4Al_{43}$ type structures and some magnetic properties of these compounds 23
magnetic properties of $Ho_2Co_{17-x}Ga_x$ compounds 37
magnetic properties of $YCo_{10}Mo_{2-x}M_x$ compounds (M=Si or V) 41
mechanical alloying of iron–hematite powders 199
structure, phase transformation and magnetic properties of Nd–Fe–C alloys made by mechanical alloying and subsequent annealing 215
Magnetic structure
the Fe ordering in RFe_6Ge_6 compounds with non-magnetic R (R=Y, Lu, Hf) studied by neutron diffraction and magnetic measurements 59
Magnetisation
physical properties of GdNiIn L12
the Fe ordering in RFe_6Ge_6 compounds with non-magnetic R (R=Y, Lu, Hf) studied by neutron diffraction and magnetic measurements 59
Magnetoelasticity
magnetic and magnetoelastic properties of β-UH_3 32
Magnetoresistance
order parameter of the metal to insulator phase transition in the thio spinel $CuIr_2S_4$ 1
Magnets
a model relating remanence and microstructure of $SmCo_5$ magnets 257
Mechanical alloying
mechanical alloying of iron–hematite powders 199
structure, phase transformation and magnetic properties of Nd–Fe–C alloys made by mechanical alloying and subsequent annealing 215
mechanical alloying and hydrogen absorption properties of the Mg–Ni system 302
Mechanical milling
activation behaviour of ZrCrNi mechanically milled with nickel 265
Melt-spinning
investigations on synthesis, characterization and hydrogenation behaviour of the spin- and thermal-melted versions of $LaNi_{5-x}Si_x$ (x=0.1, 0.3, 0.5) hydrogen storage materials 240
Metal hydrides
lattice expanding behaviour and degradation of $LaNi_5$-based alloys 205
Mg based alloys
hydrogen desorption properties of the quaternary alloy system $Mg_{2-x}M1_xNi_{1-y}M2_y$ 246
Mg–$LaNi_5$ composites
hydriding and dehydriding characteristics of Mg-$LaNi_5$ composite materials prepared by mechanical alloying 235
Mg–Mg_2Ni composite
mechanical alloying and hydrogen absorption properties of the Mg–Ni system 302
Mg_2Ni
electrochemical characteristics of a homogeneous amorphous alloy prepared by ball-milling Mg_2Ni with Ni 76
Mg_2Ni alloys
effect of lanthanum additions on electrode properties of Mg_2Ni 231
Mixing calorimetry
enthalpies of formation of Zr–Au compounds determined by direct reaction calorimetry 142
$Mn_{2.47}V_{0.94}Mo_{1.06}O_8$
crystal growth and structure of $Mn_{2.47}V_{0.94}Mo_{1.06}O_8$ 79
Modelling
thermodynamic optimisation of the Co–Nb system 105
Molar heat capacity
enthalpy increment measurements of $Sr_3Zr_2O_7$(s) and $Sr_4Zr_3O_{10}$(s) 19

Nanocomposites
mechanical alloying of iron–hematite powders 199
Nanocrystalline
activation behaviour of ZrCrNi mechanically milled with nickel 265
NdFeB alloys
effects of reduced hydrogen pressure on magnetic properties of HDDR-treated NdFeGaB alloy powders 270

Nd–Fe–C alloy
structure, phase transformation and magnetic properties of Nd–Fe–C alloys made by mechanical alloying and subsequent annealing 215
Neodymium
interaction of neodymium and antimony with transition metals L16
synthesis and crystal structure of $NdFe_{0.45}Ge_2$ and $HoFe_{0.33}Ge_2$ 86
Neutron diffraction
magnetic properties of RRuGe (R=Gd-Er) compounds L4
crystal structure and magnetic properties of the compound $Ce_2Ni_{15}Si_2$ 50
the Fe ordering in RFe_6Ge_6 compounds with non-magnetic R (R=Y, Lu, Hf) studied by neutron diffraction and magnetic measurements 59
Nickel–hydrogen battery
electrochemical characteristics of a homogeneous amorphous alloy prepared by ball-milling Mg_2Ni with Ni 76
Nickel/metal hydride battery
charge characteristics of sealed-type nickel/metal-hydride battery 252
Ni–In compounds
phase transition in $Ni_{30}In_{70}$ alloy studied with PAC method 14
Niobium
thermodynamic optimisation of the Co–Nb system 105
Non-equilibrium phases
mechanical alloying of iron–hematite powders 199

O-T phase transition
cell volume expanded $ErBa_2Cu_3O_x$ near $y=6.5$ through getter annealing 70
Oxide superconductors
thermodynamic conditions for the synthesis of oxide superconductors 66
Oxygen concentration
thermodynamic conditions for the synthesis of oxide superconductors 66
Oxygen ordering
cell volume expanded $ErBa_2Cu_3O_x$ near $y=6.5$ through getter annealing 70

Permanent magnet materials
effects of reduced hydrogen pressure on magnetic properties of HDDR-treated NdFeGaB alloy powders 270
Phase diagram
interaction of neodymium and antimony with transition metals L16
thermodynamic optimisation of the Co–Nb system 105
the phase diagram of the Lu–In system 154
ternary Ce–Co–Ge system 189
Phase diagram calculations
a thermodynamic assessment of the Co–Sm system 149
Phase relationships
isothermal section of the Ti–Si–Ga system in the Ti-rich corner at 1350°C 167
Phase transformation
order parameter of the metal to insulator phase transition in the thio spinel $CuIr_2S_4$ 1
Phase transition
phase transition in $Ni_{30}In_{70}$ alloy studied with PAC method 14
structure, phase transformation and magnetic properties of Nd–Fe–C alloys made by mechanical alloying and subsequent annealing 215
Plateau width
lattice expanding behaviour and degradation of $LaNi_5$-based alloys 205

Rare earth
synthesis and crystal structure of $NdFe_{0.45}Ge_2$ and $HoFe_{0.33}Ge_2$ 86
Rare earth compounds
crystallographic data of new ternary CeFeSi-type RTiGe (R=Y, Gd–Tm) compounds L14
magnetic properties of $Ho_2Co_{17-x}Ga_x$ compounds 37
magnetic properties of $YCo_{10}Mo_{2-x}M_x$ compounds (M=Si or V) 41
Rare earth iron germanide
the Fe ordering in RFe_6Ge_6 compounds with non-magnetic R (R=Y, Lu, Hf) studied by neutron diffraction and magnetic measurements 59
Rare earth paladium germanides
synthesis and crystal structure of new representatives of the $YIrGe_2$ structure type 192
Rare earth ruthenium germanides
magnetic properties of RRuGe (R=Gd-Er) compounds L4
Remanence
a model relating remanence and microstructure of $SmCo_x$ magnets 257
Resistivity
order parameter of the metal to insulator phase transition in the thio spinel $CuIr_2S_4$ 1
β-Rhombohedral boron
thermal expansion of β-rhombohedral boron 54

Sample homogeneity
improvement of the cation-distribution in the polycrystalline high-temperature superconductor LaSrCuO 279
Scandium boride
a new scandium boride: ScB_{19} 211
ScB_{19}
a new scandium boride: ScB_{19} 211
Short range ordering
the structure of liquid Bi_2Te_3 alloys near the stoichiometric region 100
Si substitution
investigations on synthesis, characterization and hydrogenation behaviour of the spin- and thermal-melted versions of $LaNi_{5-x}Si_x$ (x=0.1, 0.3, 0.5) hydrogen storage materials 240
Sm–Co
a model relating remanence and microstructure of $SmCo_x$ magnets 257
Sputtering
anomalous magnetic behaviour Of $(Tb_{0.27}Dy_{0.73})_{0.32}Fe_{0.68}$ amorphous thin film L9
Statistical-thermodynamics
high-pressure studies of the $TiCr_{1.8}$–H_2 system Statistical thermodynamics above the critical temperature 113
Strontium zirconates
enthalpy increment measurements of $Sr_3Zr_2O_7$(s) and $Sr_4Zr_3O_{10}$(s) 19
Structural relationships
new $TbFeSi_2$- and $U_3Ni_4Si_4$-type structure compounds obtained in R–T–T′–X systems (R=rare earth elements; T=Mn, Co, Ru, Rh; T′=Ni, Cu, Pd, Pt; X=Si, Ge) 182
Structural transition
structural and hydrogen sorption studies of $NdNi_{5-x}Al_x$ and $GdNi_{5-x}Al_x$ 136
Structure
crystal growth and structure of $Mn_{2.47}V_{0.94}Mo_{1.06}O_8$ 79
the structure of liquid Bi_2Te_3 alloys near the stoichiometric region 100
Structure type
crystallographic data of new ternary CeFeSi-type RTiGe (R=Y, Gd–Tm) compounds L14
Substitution
hydrogen desorption properties of the quaternary alloy system $Mg_{2-x}M1_xNi_{1-y}M2_y$ 246

Superconducting transition temperature
thermodynamic conditions for the synthesis of oxide superconductors 66
Surface modifications
the initial stages of the reaction between ZrCo and hydrogen studied by hot-stage microscopy 158
Synthesis
synthesis and characterization of new cuprates with the 1222 structure $(Ln,Zn)Sr_2(Ln,Ce)_2Cu_2O_z$ (Ln=rare earth element) 11

Technetium
thermal conductivity of technetium 274
Ternary alloys
isothermal section of the Ti–Si–Ga system in the Ti-rich corner at 1350°C 167
Ternary cerium compounds
ternary Ce–Co–Ge system 189
Ternary gadolinium compound
physical properties of GdNiIn L12
Ternary intermetallic compounds
synthesis and crystal structure of new representatives of the $YIrGe_2$ structure type 192
Ternary rare earth silicides and germanides
new $TbFeSi_2$- and $U_3Ni_4Si_4$-type structure compounds obtained in R–T–T′–X systems (R=rare earth elements; T=Mn, Co, Ru, Rh; T′=Ni, Cu, Pd, Pt; X=Si, Ge) 182
Tetragonal system
a new scandium boride: ScB_{19} 211
Texture
a model relating remanence and microstructure of $SmCo_5$ magnets 257
Thermal conductivity
thermal conductivity of technetium 274
Thermal diffusivity
thermal conductivity of technetium 274
Thermal expansion
magnetic and magnetoelastic properties of β-UH_3 32
thermal expansion of β-rhombohedral boron 54
Thermodynamic estimation
estimation of the standard enthalpy of formation of double oxide 6
Thermodynamic modelling
present achievements, problems and perspectives associated with a semi-empirical study of the Al–Cu–Mg–Si–Zn light alloy system 90
Thermodynamic properties
a thermodynamic modelling of the Co–Ce system 121
a thermodynamic assessment of the Co–Sm system 149
thermodynamic investigation of viscosity in Cu–Bi and Bi–Zn liquid alloys 195
Thermodynamics
enthalpy increment measurements of $Sr_3Zr_2O_7$(s) and $Sr_4Zr_3O_{10}$(s) 19
thermodynamic optimisation of the Co–Nb system 105
high-pressure studies of the $TiCr_{1.8}$–H_2 system Statistical thermodynamics above the critical temperature 113
standard enthalpies of formation of some 3d transition metal silicides by high temperature direct synthesis calorimetry 128
Thiospinel
order parameter of the metal to insulator phase transition in the thio spinel $CuIr_2S_4$ 1
$TiCr_{1.8}$
high-pressure studies of the $TiCr_{1.8}$–H_2 system Statistical thermodynamics above the critical temperature 113
Ti–Si–Ga alloys
isothermal section of the Ti–Si–Ga system in the Ti-rich corner at 1350°C 167
Titanium
on the charge/discharge behavior of Ti_2Ni electrode in 6 M KOH aqueous and deuterium oxide solutions 224
Transition metals
interaction of neodymium and antimony with transition metals L16
Transition metal silicides
standard enthalpies of formation of some 3d transition metal silicides by high temperature direct synthesis calorimetry 128
1222 type cuprates
synthesis and characterization of new cuprates with the 1222 structure $(Ln,Zn)Sr_2(Ln,Ce)_2Cu_2O_z$ (Ln=rare earth element) 11

Uranium compounds
magnetic and magnetoelastic properties of β-UH_3 32

Viscosity
thermodynamic investigation of viscosity in Cu–Bi and Bi–Zn liquid alloys 195

Wet chemical preparation
improvement of the cation-distribution in the polycrystalline high-temperature superconductor LaSrCuO 279

XAFS
crystal structure and magnetic properties of the compound $Ce_2Ni_{15}Si_2$ 50
X-ray diffraction
the structure of liquid Bi_2Te_3 alloys near the stoichiometric region 100

Y–Cu alloys
Cu_xY compounds as thin films: crystallographic and compositional analyses of yttrium rich phases 283
Cu_xY compounds as thin films: crystallographic and compositional analyses of copper rich phases 294
Y thin films
Cu_xY compounds as thin films: crystallographic and compositional analyses of yttrium rich phases 283
Cu_xY compounds as thin films: crystallographic and compositional analyses of copper rich phases 294

Zr–Au alloys
enthalpies of formation of Zr–Au compounds determined by direct reaction calorimetry 142
Zr-based Laves phase
activation behaviour of ZrCrNi mechanically milled with nickel 265